Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for receiving a signal, said method comprising the steps of:

receiving an RF signal, said RF signal comprising a plurality of information channel signals each comprising different code division multiple access data spread using a different spreading code, wherein each of said plurality of information channel signals are transmitted in one of a plurality of transmission bands, and each of said plurality of information channel signals is carried on one of a plurality of carrier frequencies;

down-converting said RF signal to form an intermediate signal, wherein said intermediate signal comprises down-converted versions of each of said plurality of information channel signals, and said down-converted versions of each of said plurality of information channel signals are generated from a plurality of frequencies, said down-converted versions of each of said plurality of information channel signals are within a common frequency spectrum; and

decoding said intermediate signal to extract data from said down-converted versions of each of said plurality of information channel signals.

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Original) The method of claim 1, wherein said step of down-converting comprises down-converting each one of said plurality of carrier frequencies by a plurality of oscillator frequencies.

6. (Original) The method of claim 5, wherein the frequency spacing between each adjacent pair of said plurality of carrier frequencies and between each adjacent pair of said oscillator frequencies is substantially the same.

7. (Original) The method of claim 1, wherein said common frequency spectrum comprises a first common frequency spectrum, and the step of decoding said intermediate signal comprises the step of forming a base band signal by down-converting said first common frequency spectrum to a second common frequency spectrum, said second common frequency spectrum lower in frequency than said first common frequency spectrum.

8. (Original) The method of claim 7, wherein the step of forming said base band signal further comprises down-converting the intermediate signal using a first oscillator signal to form a first base band component signal and a second oscillator signal to form a second base band component signal, the first and second oscillator signals each at a same frequency and a different phase.

9. (Original) The method of claim 8, wherein said first base band component comprises a first folded signal and said second base band component comprises a second folded signal, each folded signal

having a frequency spectrum narrower than said first common frequency spectrum.

10. (Original) The method of claim 9 further comprising the steps of:

sampling said first base band component to form a first digital representation;

sampling said second base band component to form a second digital representation; and

combining said first and said second digital representations to form an unfolded signal, said unfolded signal having a frequency spectrum greater than the spectrum of the first folded signal.

11. (Original) The method of claim 1, wherein the step of receiving an RF signal comprises receiving an RF signal from a cellular radio base station.

12. (Original) The method of claim 1, further comprising the step of filtering said intermediate signal to attenuate at least one signal outside the common frequency spectrum before performing said step of down-converting.

13. (currently Amended) A mobile radio telephone unit comprising:

an antenna configured to receive an RF signal, said RF signal comprising a plurality of information channel signals, each comprising different code division multiple access data spread using a different spreading code, wherein each of said plurality of information channel signals is transmitted in one of a plurality of transmission bands, and each of said plurality of information channel signals is carried on one of a plurality of carrier frequencies;

a down-converter operatively coupled to the antenna and configured to down-convert said RF signal to form an intermediate

signal, wherein said intermediate signal comprises down-converted versions of each of said plurality of information channel signals, and said down-converted versions of each of said plurality of information channel signals are generated from a plurality of frequencies, said down-converted versions of each of said plurality of information channel signals are within a common frequency spectrum;

a decoder operatively coupled to the down-converter and configured to decode said intermediate signal to extract data from said down-converted versions of each of said plurality of information channel signals.

14. (Cancelled)

15. (Currently Amended) The apparatus of claim 13, wherein said down-converter is configured to down-convert each of said plurality of carrier frequencies by a plurality of ~~carrier~~ oscillator frequencies having a lower frequency.

16. (Original) The apparatus of claim 13, wherein said down-converter comprises an oscillator for generating an oscillator signal comprising a plurality of oscillator frequencies, the frequency spacing between each adjacent pair of said plurality of carrier frequencies and between each adjacent pair of said plurality of oscillator frequencies being substantially the same.

17. (Cancelled)

18. (Cancelled)

19. (Cancelled)

20. (Original) A CDMA receiver for operating in at least a first mode and a second mode, said CDMA receiver comprising:

an initial RF stage, said initial RF stage for outputting a received RF signal;

an oscillator, said oscillator for generating a plurality of oscillator signals, each at a different frequency, when the

receiver operates in the first mode and generating a single oscillator signal when the receiver operates in the second mode;

a down-converter coupled to said initial RF stage and said oscillator, said down-converter for receiving said received RF signal and multiplying said RF signal by said plurality of oscillator signals when the receiver operates in the first mode, and multiplying said RF signal by said single oscillator signal when the receiver operates in the second mode, to generate an intermediate signal; and

a base band stage, coupled to said down-converter, said base band stage for processing said intermediate signal.

21. (New) A base station unit comprising:

a receiver to receive an RF signal, said RF signal comprising a plurality of information channel signals, each comprising different code division multiple access data spread using a different spreading code, wherein each of said plurality of information channel signals is transmitted in one of a plurality of transmission bands, and each of said plurality of information channel signals is carried on one of a plurality of carrier frequencies; and

a down-converter operatively coupled to said receiver and configured to down-convert said RF signal to form an intermediate signal, wherein said intermediate signal comprises down-converted versions of each of said plurality of information channel signals, and said down-converted versions of each of said plurality of information channel signals are generated from a plurality of frequencies, said down-converted versions of each of said plurality of information channel signals are within a common frequency spectrum.

22. (New) The base station unit of claim 21, wherein said down-converter comprises an oscillator for generating an oscillator signal comprising a plurality of oscillator frequencies, the frequency spacing between each adjacent pair of said plurality of carrier frequencies and between each adjacent pair of said plurality of oscillator frequencies being substantially the same.

23. (New) A chip apparatus comprising:

a receiver to receive an RF signal, said RF signal comprising a plurality of information channel signals, each comprising different code division multiple access data spread using a different spreading code, wherein each of said plurality of information channel signals is transmitted in one of a plurality of transmission bands, and each of said plurality of information channel signals is carried on one of a plurality of carrier frequencies; and

a down-converter operatively coupled to said receiver and configured to down-convert said RF signal to form an intermediate signal, wherein said intermediate signal comprises down-converted versions of each of said plurality of information channel signals, and said down-converted versions of each of said plurality of information channel signals are generated from a plurality of frequencies, said down-converted versions of each of said plurality of information channel signals are within a common frequency spectrum.

24. (New) The chip apparatus of claim 23, wherein said down-converter comprises an oscillator for generating an oscillator signal comprising a plurality of oscillator frequencies, the frequency spacing between each adjacent pair of said plurality of carrier frequencies and between each adjacent pair of said plurality of oscillator frequencies being substantially the same.

25. (New) An apparatus comprising:

a means for receiving an RF signal, said RF signal comprising a plurality of information channel signals each comprising different code division multiple access data spread using a different spreading code, wherein each of said plurality of information channel signals are transmitted in one of a plurality of transmission bands, and each of said plurality of information channel signals is carried on one of a plurality of carrier frequencies; and

a means for down-converting said RF signal to form an intermediate signal, wherein said intermediate signal comprises down-converted versions of each of said plurality of information channel signals, and said down-converted versions of each of said plurality of information channel signals are generated from a plurality of frequencies, said down-converted versions of each of said plurality of information channel signals are within a common frequency spectrum.

26. (New) The apparatus of claim 25, wherein said down-converter comprises an oscillator for generating an oscillator signal comprising a plurality of oscillator frequencies, the frequency spacing between each adjacent pair of said plurality of carrier frequencies and between each adjacent pair of said plurality of oscillator frequencies being substantially the same.